

IN THE SPECIFICATION

Please amend the paragraph at page 3, line 4 to page 3, line 16, as follows:

A distance detecting apparatus according to an aspect of the present invention includes a light emitting unit that emits a light in a light emitting direction which is the direction to an object, the light having a distributed pattern in a predetermined direction; a photographing device that obtains an image of the object along [[with]] a photographing direction; a holding mechanism that holds the light emitting unit and the photographing apparatus in such a relation that (a) the photographing direction is not in a plane that includes both the light emitting direction and the predetermined direction of the distributed pattern, and (b) the photographing direction is not parallel to the light emitting direction; and a distance deriving unit that derives a distance between the object and a predetermined position based on the image obtained by the photographing device.

Please amend the paragraph at page 3, line 17 to page 4, line 6, as follows:

An air bag system controlling apparatus according to another aspect of the present invention includes a light emitting unit that emits a light in a light emitting direction which is the direction to an object seating on a seat of a vehicle, the light having a distributed pattern in a predetermined direction; a photographing device that obtains an image of the object along [[with]] a photographing direction; a holding mechanism that holds the light emitting unit and the photographing apparatus in such a relation that (a) the photographing direction is not in a plane that includes both the light emitting direction and the predetermined direction of the distributed pattern, and (b) the photographing direction is not parallel to the light emitting direction; a distance deriving unit that derives a distance between the object and a predetermined position based on the image obtained by the photographing device; and an air

bag system controlling unit that controls an operation of an air bag based on the distance derived.

Please amend the paragraph at page 4, lines 7-23, as follows:

An air bag system controlling apparatus according to still another aspect of the present invention includes a light emitting unit that emits a light in a light emitting direction which is the direction to an object the light having a distributed pattern in a predetermined direction; a photographing device that obtains an image of the object along [[with]] a photographing direction; a holding mechanism that holds the light emitting unit and the photographing apparatus, in such a relation that (a) the photographing direction is not in a plane that includes both the light emitting direction and the predetermined direction of the distributed pattern, and (b) the photographing direction is not parallel to the light emitting direction; a memory unit that stores a computer program that makes it possible to execute a function of deriving a distance between the object and a predetermined position based on the image obtained by the photographing device, and a function of controlling an operation of an air bag based on the distance derived; and a processor that can access the memory unit and execute the computer program.

Please amend the paragraph at page 4, line 24 to page 5, line 6, as follows:

A distance detecting apparatus according to still another aspect of the present invention includes a light emitting unit that emits a light in a light emitting direction which is the direction to an object, the light having a plurality of pattern lights that are parallel to each other; a photographing device that obtains an image of the object along [[with]] a photographing direction; and a distance deriving unit that derives a distance between the

object and a predetermined position based on an interval between the pattern lights in the image.

Please amend the paragraph at page 5, lines 7-16, as follows:

An airbag system controlling apparatus according to still another aspect of the present invention includes a light emitting unit that emits a light in a light emitting direction which is the direction to an object seated in a seat of a vehicle, the light having a plurality of pattern lights that are parallel to each other; a photographing device that obtains an image of the object along [[with]] a photographing direction; a distance deriving unit that derives a distance between the object and a predetermined position based on an interval between at least two of the pattern lights in the image; and an air bag system controlling unit that controls an operation of an air bag based on the distance derived.

Please amend the paragraph at page 5, line 17 to page 6, line 4, as follows:

An airbag system controlling apparatus according to still another aspect of the present invention includes a light emitting unit that emits a light in a light emitting direction which is the direction to an object seated in a seat of a vehicle, the light having a plurality of pattern lights that are parallel to each other; a photographing device that obtains an image of the object along [[with]] a photographing direction; a memory that stores a computer program that makes it possible to execute a function of deriving a distance between the object and a predetermined position based on an interval between at least two of the pattern lights in the image obtained by the photographing device, and a function of controlling an operation of an air bag based on the distance derived; and a processor that can access the memory unit and execute the computer program.

Please amend the paragraph at page 6, lines 5-15, as follows:

A method of detecting a distance according to still another aspect of the present invention includes emitting light in a light emitting direction to thereby irradiate an object, the light being having a distributed pattern in a predetermined direction; obtaining an image of the object along ~~[[with]]~~ a photographing direction, in such a manner that (a) the photographing direction is not in a plane that includes both the light emitting direction and the predetermined direction of the distributed pattern and (b) the photographing direction is not parallel to the light emitting direction; and deriving a distance between the object and a predetermined position based on a position of the pattern light in the image.

Please amend the paragraph at page 6, lines 16-22, as follows:

A method of detecting a distance according to still another aspect of the present invention includes emitting light in a light emitting direction to thereby irradiate an object, the light having a plurality of pattern lights that are parallel to each other; obtaining an image of the object along ~~[[with]]~~ a photographing direction; and deriving a distance between the object and a predetermined position based on an interval between the pattern lights in the image.

Please amend the paragraph at page 11, lines 7-16, as follows:

As illustrated in Fig. 1, the holding mechanism 130 may include a frame that has two ends and that has a shape of a horseshoe, so that the ends of the frame may support the photographing apparatus 110 and the light emitting unit 120. Other structures may be used as the holding mechanism 130 as long as both the photographing apparatus 110 and the light emitting unit 120 are held at positions ~~these fulfill~~ fulfilling the above-mentioned two conditions. For example, the photographing apparatus 110 and the light emitting unit 120

may be held respectively by different frames that are fixed to a material in a vehicle, such as a dashboard.

Please amend the paragraph at page 12, lines 1-5, as follows:

A principle for deriving the distance between a position of the object 102 that is identified based on the position of the line pattern in the image, and the predetermined position, will be explained next with reference to Fig. 3, Fig. 4, and Fig. 5. For the sake of convenience, it is assumed that the object 102 is in a plane.

Please amend the paragraph at page 23, lines 18-25, as follows:

Fig. 14 illustrates a structure of an air bag system controlling apparatus according to a third embodiment. In an air bag system controlling apparatus 300, a light emitting unit 320 emits light, which has different form from that of the light emitting unit 120 of the first embodiment. In the third embodiment, the structural elements that have the same or similar structures, or the same or similar functions have been provided with the same reference numerals as those in the first embodiment.